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Research Institute on Anomalous Phenomena (RIAP) is an independent scientific research body, established in 1992 by the Kharkov-based aerospace company *Vertical* and aimed at scientific studies in the fields of non-traditional energy sources, the problem of anomalous atmospheric phenomena and the SETI (Search for Extraterrestrial Intelligence) question.

We study:
anomalous phenomena.
We consider:
any theories.
We accept:
normal proofs,
exact references.

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EDITORIAL

ON THE QUEST FOR TANGIBLE EVIDENCE

This RB issue is to some extent special. For the first time we are touching upon the so-called "alien abductions" that have for the last 20 years become an essential (as for the USA—maybe, even central) part of ufology, serving thereby to distance it further from mainstream science. One cannot, however, say that any established scientific research body has ever conducted a serious investigation of the "abduction phenomenon", reached some definite conclusions (say, that it is of purely psychosocial origin) and brought these conclusions to public notice. To the best of my knowledge, the number of such investigations falls far short even of the number of serious UFO study programs. Bluntly speaking, there was no such investigation at all.

On the other hand, an evident inclination of many ufologists to accept abduction stories at face value, and to hold forth on "genetic experiments" performed on humans by malicious aliens who are planning either conquering our planet, or just breeding a new race of intelligent beings, is met with natural resistance by scientists and the serious reading public in general.

Incidentally, the seemingly "obvious" connection between the UFO phenomenon and "alien abductions" ("UFOs are ET spacecraft and their crews grab humans who carelessly approach a landed "saucer" at a lonely place or just peacefully sleep in their home beds") is by no means obvious. There exist, first, some physical objects in the atmosphere, whose nature and origin still remain unknown, and there also exist, second, stories with consistent contents: some beings come to bedrooms, drag out from there their residents, usually directly through the walls of the rooms, and then perform on them some unpleasant manipulations in a closed location. The latter scheme works *at least* in 50% of abduction occurrences; as for the former Soviet Union, "saucer abduction" reports from its territory (that is, when a witness is grabbed by UFO occupants "in the field" and examined in a "flying saucer") were extremely rare. Soviet people usually had friendly talks with the "extraterrestrials", travelling in "saucers" only at will. Refusal to enter a UFO and make a trip to "another planet" was, as a rule, well understood, and the ETIs did not insist on their proposal. (Probably, they also were aware of the "iron curtain" and possible troubles that would have awaited the abductee *after* his return.) Thus, the Soviet contactee could easily avoid unpleasant medical procedures in an alien starship, to say nothing about intercourse with, God forbid, alien blondes.

Although "alien abductions" are certainly not a purely American phenomenon, they do seem to occupy a special place in the collective consciousness of American society. And in any case, in one respect the UFO problem and the problem of "alien abductions" are almost antithetical to each other: the psychosocial aspect of the former, however important, is just a superstructure over the physical "core" of this phenomenon, whereas in the abduction problem we are unaware if there exists any "physical core" at all. To simplify somewhat the real situation, one could say that in the UFO problem we deal with an "evidently real" phenomenon that does not basically cause any "noticeable" harm, and in the abduction problem we deal with an "evident harm" caused by a phenomenon, whose ontological status is more than indefinite.

But is it so very important? After all, the "subjective" ("psychophysiological") reality of "alien abductions" is beyond doubt and victims of this phenomenon need effective—and quick—help, more than a long discussion with a vague result. A paper by Dr. Phillip S. Duke, Ph.D. (he is also a graduate of the University of California School of Medicine), included in this RB issue, completely answers this principle—even if Dr. Duke himself, judging from a number of his remarks, believes that aliens are physically real and abducting humans for their own purposes. Having discovered a certain medical problem among some abductees, he recommends solving it by an effective and safe method. Effectiveness and safety of *this* method does not depend on whether these people were in fact physically abducted by "aliens", or whether they merely imagined their stories.

The latter assumption has also its right to exist—though better if not in such a primitive form. To effectively help the "anomalously traumatized" people, we must find out whether the traumas are "physiological with psychological consequences", or vice versa. Some treatments may be the same for both variants, other may not. Incidentally, if during a sufficiently long and active search no tangible evidence is after all discovered, we will have to accept the "subjective" model of the abduction phenomenon and to act accordingly. At the current stage of investigations it is equally irresponsible to attribute the abduction syndrome to the bad influence of the "Close Encounters of the 3rd Kind" film, or to shout "Help, Help! Cosmic rape!" One can understand the perplexity of the "anomalously traumatized", but it can appear that some scientists have found themselves in the same situation (as regards the phenomenon as a whole). Their seemingly rational criticism resembles rather a form of psychological defense against a nightmarish phenomenon.

The present author is willing to describe here his own phobias in this respect. At a rational level of consideration I simply do not know if the abduction phenomenon is physically real, or not. The lack of substantial tangible evidence suggests that the "subjective" conception is at least worthy of attention (again, this consideration is hardly irrational). But as for the emotional level, I am rather satisfied with this conclusion—since I actively dislike the pattern of the "contact" between aliens and earthlings that is emerging from the abductees' reports. I've gotten used to the "Great Ring" of cosmic civilizations by Ivan Efremov and "Galactic Club" by Ronald Bracewell, not to this cosmic breeding farm. And who can like nightmares, after all?!

Thus, the present author is realizing some of his phobias, comprehending that a certain part of his inner *negative*—and not at all "skeptical"—attitude to the assumption of the physical reality of the abduction phenomenon is inherently irrational. Can one hope that this comprehension will restrain me from an incorrect interpretation of empirical facts? Frankly speaking, not necessarily. Personal biases and phobias may be overcome only in joint work of a normal scientific research community, where individual preferences are mutually neutralized (in pseudoscientific CSICOP-like communities these preferences are only intensifying).

Some chances of discovering "tangible evidence" of a sort seem to emerge from the paper "The Russian Roswell: A Legend Under Examination" by Dr. Yuriy Morozov, published in this RB issue. Its author is considering a story about the landing of a strange (air? space?) craft that appears to have occurred in the Stavropol province in the 19th century. This craft was piloted by "strange people" who soon died, since they "could not breathe with our air". True, typologically this story resembles more the "Aurora incident" than the Roswell one, but the former is, as competent ufologists are certain, an established hoax, whereas everything seems to indicate that the "Stavropol story" is no hoax at all. "Trivial explanations" cannot certainly be ruled out here—as is stressed by the paper's author. But at least, one can outline a "methodologically correct" scheme of possible verification of the story: first, we should try to determine, based on its contents, the most probable place of the incident, and then try to find there its material traces (say, parts of the craft, or the remains of the pilots). The scheme does look simple—just as any scheme may look. To put it into practice will not be that easy, however. But an attempt seems to be well worth while.

And finally, we are continuing to publish in this issue of the Bulletin readers' comments to the paper "History of State-Directed UFO Research in the USSR" by Yuliy Platov and Boris Sokolov (RB, 1999, Vol. 5, No. 3-4.) Having taken a cold shower from a reader in previous RB issue (Vol. 6, No. 2-3, pp. 11-12), it is with much satisfaction that I see another letter (by Dr. Alexey Koroliuk)—expressing a more positive opinion both about the paper and the present editor, who was bold enough to publish it. Hopefully, this reader's response will not be the last benevolentone.

— Vladimir V. Rubtsov

THE "RUSSIAN ROSWELL": A LEGEND UNDER EXAMINATION

Y. N. Morozov

1. Introduction

The case in point is a legend that, if proved to have been based on a real event, would be of much significance to ufology or at least to the history of aviation. However, up to this time its contents have not been verified by any objective methods, nor is it known if such a verification will ever become possible. Meanwhile, the legend itself is definitely worthy of attention and research interest. That is why we will try in this paper to extract as much information as possible from its existing records. Obviously enough, our conclusions will be mostly tentative—as usually happens when researchers are concerned with nothing but oral and folklore sources.

2. Variants of the legend

In March of 1957 A. A. Mikhaylov, Chairman of the Astronomical Council of the USSR Academy of Sciences, obtained a letter from a certain Ol'ga Vasilievna Maslennikova. She wrote:

"Dear Comrade Mikhaylov,

I happened to live in the Kuban, in the *stanitsa* [large Cossack village] of Guiaguinskaya. My landlord [the author means the owner of the village house where the Maslennikovs were then renting a room,—*Y. M.*] moved here, together with his wife and children, from the Stavropol province. He works as a shepherd. One day, he described to me and my daughter an interesting incident. He himself was told about this incident by his father who... had not been an eyewitness of the incident.

It so happened that a strange apparatus flew into a village of the Stavropol province. Three dark-skinned men came out of it. They were breathing hard, making signs, and soon died since they could not breathe with air. The village

residents quickly pulled apart the thing in which they had landed.

When I and my daughter asked: "What do you think—is this a fiction or not?", he gave us an evasive answer: "Who can know this!" But actually he is certain that these were beings from another planet. "Maybe from Mars?"—that was my daughter's and my idea. We were astonished by the fact that they had died from suffocation, not from wounds or shock." [1, p. 67-68]

In his reply the astronomer remarked that one could not draw any definite conclusion about the nature of the event or the authenticity of the story based on such a vague report. "Certainly,—he went on,—nobody ever came here from Mars. If such a visit had ever happened, it would have been observed in many regions, not only in the Stavropol Territory." With much caution, the scientist conjectured that the legend might have something to do with some aeronauts who had flown in a balloon and perished [1, p. 68].

Further investigation was carried out by researchers Yuriy V. Biriukov and Valeriy P. Burdakov. First, they communicated with Ol'ga Maslennikova's daughter (by that time her mother was already dead). The woman reported that she herself and her late mother had in fact heard the story from Mitrofan V. Karpenko, the shepherd. "He comes from the Stavropol Territory, if I'm not mistaken, from the *stanitsa* of Otradnaya (where the unknown apparatus probably landed). During the collectivization, all the inhabitants of Otradnaya were moved [implying: were sent into exile—*Y. M.*] to the Adygey Autonomous Region—in particular, to the *stanitsa* of Guiaguinskaya. Therefore, the present residents of Otradnaya are hardly aware of the story." [1, p. 69]

The researchers have eventually succeeded in establishing contact with Mitrofan Vasilievich Karpenko. His letter runs:

"Well, this certainly did happen long ago. Being a teenager, I liked to listen to old men's tales, and my father liked to tell them. <...> Whether this story was truthful or legendary, I don't know. Neither do I remember in which year this happened, nor where—though my father could probably tell about this. The only thing I do remember is his assertion that a certain three men traversed what he called the sky frontier, flying in a machine, not in a balloon. Father never called the machine an airplane either. It was of an unknown design. The men had no clothes. Their bodies were covered with hair, and they lived for only three days. Father stated that it was difficult for them to breathe with our air." [1, p. 69]

The fact that we have got a personal communication from M. V. Karpenko (let it be designated as *Variant B*) does not diminish the informational value of O. V. Maslennikova's letter, in which his earlier account (*Variant A*) was given. As a rule, in a separate act of narration, an informant exposes only part of what he or she knows, remembers, or thinks in this connection. It also matters that Variants A and B emerged in essentially different communicative situations. M. V. Karpenko imparted his story to the Maslennikovs in the atmosphere of an easy and confidential conversation—when the story itself was fresher in his memory. When replying to the questions of the investigators, he no doubt felt more constrained. Besides, the structure of his story was in every case formed under the influence of his audience. Beyond Variant A one can guess the questions that were asked by O. V. Maslennikova: "Did your father see this with his own eyes? Did the visitors say anything about themselves—namely, who were they, or where did they come from? And what happened to the aircraft?" As for Variant B, it begins with Karpenko's answers to the questions which interested Y. V. Biriukov and V. P. Burdakov: "When did it happen? Where? Wasn't it a balloon or an airplane?"

Hence it follows that the details contained only in Variant A ("dark skin", "they were making signs", etc.) were not necessarily invented or conjectured by O. V. Maslennikova. She may have heard them from the mouth of M. V. Karpenko. The latter might have omitted these details in his subsequent letter to the investigators either because he had forgotten them by that time, or simply because he was not asked about them.

The above variants of the legend were published by Y. V. Biriukov and V. P. Burdakov in the journal *Yuniy Tekhnik* (The Young Technologist), 1962, No. 4. Three years later, there appeared in the Stavropol newspaper *Molodoy Leninets* (The Young Leninist) some additional information. Having paraphrased the story published in the journal, the anonymous author of the newspaper article went on:

"F. V. Chernyshov, a regional ethnographer from our Stavropol Territory, made the acquaintance of engineer V. P. Burdakov and heard from him another version of the legend. It was Nikolay Pchelintsev, a Moscow schoolboy, who told Burdakov that in 1959 he had met with a 110-year old man who had been living in Georgia [*Gruziya*, then a Soviet republic in Caucasia, now an independent state,—*Y. M.*]. The old man told Pchelintsev an interesting story that he had heard from his grandfather. The Georgian patriarch's account much resembled the above-discussed story, but when asked where had the mysterious vehicle landed, the old man referred to some ravine near Elbrus mountain." [2] Notwithstanding the extreme scantiness of information about this variant of the legend, let us designate it as *Variant C*.

And finally, there exists one more variant that

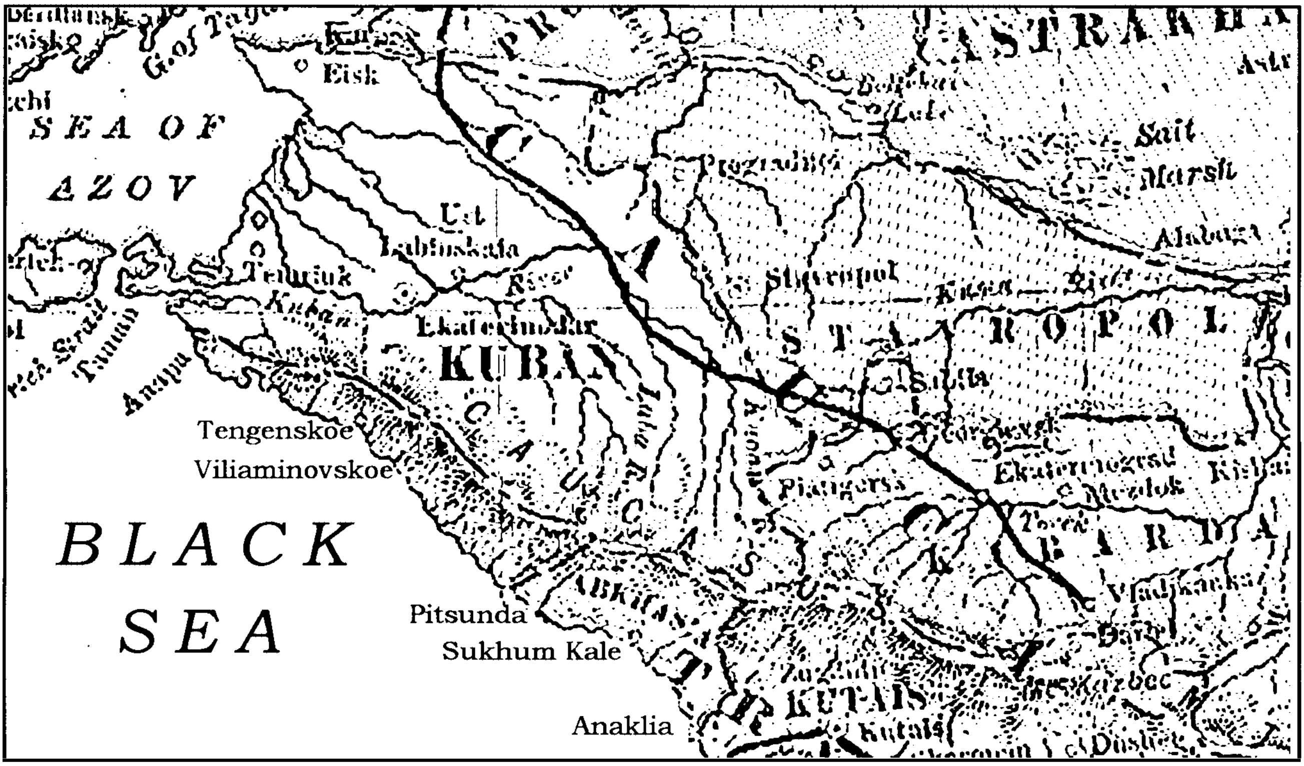


Fig. 1. The Stavropol province, Kuban, and adjacent territories in the late 19th century.

became known very recently. It was published in the newspaper *Anomaliya*, as a supplement to my paper on this legend (see Ref. 3). This *Variant D* is again a letter. It was sent in 1985 by Mrs. Irina Danilova, resident in Moscow, to the Commission on Anomalous Phenomena of the Committee on the Problems of Environmental Protection of the All-Union Council of Scientific Technical Societies. Here is the text of her letter:

"For a long time I have wanted to bring to light a story which probably has to do with space visitors that I heard, when a child, from my grandfather—but could not make up my mind since I knew the story only at second hand and without much detail. But one day I bought in the [bookshop] *Staraya Kniga* (Old Book) a file of the *Yuniy Tekhnik* journal, one of its issues containing a story very similar to the one that I know. Besides, my grandfather, Afanasiy Nikitich Pugach, comes from the region that was the scene of the event described in the journal.

He too told of the arrival of three dark-skinned persons in something like an airplane. Their aircraft resembled a big arrowhead. The visitors looked like normal humans, but they were very thin and dark-skinned. My grandfather did not say that their skin was hair-covered, just that they were ill and having difficulty in breathing. Local people did not know from what disease were they suffering, and therefore avoided approaching them. However, they brought to the visitors water and food—which remained untouched. When the visitors died, they were buried without cross or church ritual—since nobody knew to which faith they belonged. The authorities were not informed about the incident, since everybody feared an official investigation that could end up with a charge of murder.

The aircraft had many parts made of some metal resembling silver, and subsequently the local people disassembled the machine, using the metal for manufacturing household goods—in particular, kitchen utensils and *samovars*.

According to my grandfather, the event occurred at the very end of the last [that is, 19th] century. At a far later date their *kuren' ataman* [a chief of Cossacks,—*Y. M.*] heard about this story and sent a letter to Petersburg, to the Academy of Sciences, together with some preserved parts of the machine. But then the war between Russia and Japan broke out [in 1904,—*Y. M.*] and nobody came to them." [4]

Even though I. Danilova decided to write her letter after reading the published Variants A and B, one can see that her acquaintance with the printed source did not affect the contents of her variant of the legend. On the whole, Variant D is the most comprehensive. When compared to other variants, it contains more details, the event is dated with relative accuracy and, furthermore, this variant contains two motifs that are lacking (being, however, required from a logical point of view) in the other variants of the legend. First, Variant D explains why the local people did not want to inform official authorities of the incident. True, the explanation sounds rather unconvincing, being obviously invented in retrospect. Actually, the *stanitsa* residents could hardly fear any serious criminal charges: the pilots, according to the legend, had no symptoms of death by violence,

having died from exhaustion or a disease. But it is significant that only Variant D contains this "missing link" of the narrative. Second, only this text gives an answer to a natural question: what happened to the bodies of the dead pilots? Therefore, one should recognize Variant D as the most trustworthy, even though it was recorded later than the other ones.

3. Analysis of the Legend

None of the legend's variants informs us of the precise location of the event. It is designated either as "a village of the Stavropol province" (Variant A, having no contradictions in this respect with Variants B and D), or as "a ravine near Elbrus mountain" (C). However, all these vague localizations point to the same region—namely, the North Caucasus (see the map in Fig. 1). Therefore, we are dealing here with a product of local folklore-making, not with a migratory legend whose roots are usually very indefinite.

At the same time, the characters of the legend, as well as its plot, are absolutely atypical of the traditional folklore of that region. What is more, the main motifs of this story lack any obvious signs of artistic imagination or embroidery. The only possible exception is the assertion by Variant B that the visitors "lived for only three days"—one could see here an echo of the special place occupied in folklore by the number three. But as a whole, the legend gives the impression of a bare and artless description of a real event.

It is noteworthy that the event has not been interpreted in the legend from a mythological or religious standpoint—even though in the late 19th century this would be quite natural for Russian country people. A curious example can be cited here for comparison. In September 1890 a big balloon with two aeronauts was launched in St. Petersburg. Having covered more than 200 kilometers, it landed in a rural locality. "Residents of a village thought it was the Antichrist who had landed and therefore the end of the world was approaching. <...> In another village... the aeronauts were taken for saints, or holy persons, icon lamps were lighted for them, etc." [5, p. 24] But the legend under consideration is depicting a similar event from a completely rational point of view.

The informants who brought the legend up to our time were living in the age of aviation and astronautics. All of them believed that it could have been the arrival of beings from another planet that was described in the legend. However, this supposition did not affect their narrations in any way. They avoided using such terms as "spaceship", "pilots", etc.; there are in their texts no attempts to adapt the description of the visitors to the accepted image of airmen or astronauts. All this provides reason enough to believe that the essentials of the old legend have reached us in an unaltered state.

Thus, the legend fairly adequately reflects a real event. But what was it then that landed in a rural settlement in Southern Russia? To answer this question, the chronological analysis of its content is of prime importance. According to Variant D, the arrival of the unknown vehicle has to be dated to the late 19th century. Other variants allow us to make only rough estimates of the period when one or another of the informants could have heard about this event. However, even these rough estimates also point to the 19th century.

If M. V. Karpenko was sent to exile from his native village "during the collectivization" (1929–1930) together with his wife and daughters, therefore he was then not younger than 20. Consequently, he was an adolescent (12–15 years), when he heard the legend from his father, in the early 1920's at the latest. By that time his father who had been born in 1861 [1, p. 69] was in fact, according to traditional country notions, an "old man". So, we can accept the early 1920's as the upper limit of the possible temporal range of the legend's origination.

The terminology used in the legend make it possible to put back this limit by two decades at least. M. V. Karpenko mentioned (referring to his father's words) a "machine of an unknown design". When relaying his story, the Maslennikov mother and daughter used the expressions "a strange apparatus", "an unknown apparatus". Judging from the letter by I. Danilova, her grandfather did not call the machine "an airplane" either. He used this word—with reservation—only for comparison ("something like an airplane"). Meanwhile, at the earliest period of the age of aviation, when many people became aware of the word "airplane", but only a few of them ever saw airplanes with their own eyes, any "machine" coming down from the sky would most likely have been identified by country people as an "airplane". The lack of any traces of such an identification in the known variants of the legend suggests that the legend was formed before the beginning of the aviation era.

Determining the lower time limit is a more complicated task. M. V. Karpenko's father was born in 1861 rather far away from the presumed scene of the event—namely, in the Poltava province [1, p. 69]. There is no information regarding the date of his move to the Stavropol region. But the legend being a local one, he could have heard it only after arrival at the new place of residence. It is not improbable, of course, that the "air crash" had happened before Karpenko senior (the father) arrived there, and he learned of it from the old residents of this area. However, it seems more probable that the incident took place while he was living there. Excited discussions of an extraordinary event that has just happened are fixed in human memory, whether

or not someone was a direct eyewitness of the event, as a part of his/her life experience. Subsequently, such memories are for the person more significant (and therefore more worthy to be conveyed to posterity) than legends about the events that had happened before he or she migrated to this locality. Thus, taking into consideration the above-determined upper time limit, we can tentatively date the incident to the last third of the 19th century. This dating of the event on the basis of Variants A and B fully corresponds to its dating from Variant D.

Variant C contradicts, however, this conclusion. If the old man from Georgia did in fact hear about the landing of the mysterious aircraft from his grandfather, the legend might have existed even in the early 19th century. However, one should admit that Variant C's information is the least reliable. Its full text is lacking. Elements of its contents have come to us through a long chain of re-narrations: Pchelintsev the schoolboy => Burdakov the researcher => Chernyshov the regional ethnographer => anonymous author of Ref. 2. In any link of this chain the information could have been distorted. Certainly, it could also have been distorted in the course of the talk between the Georgian old man and the Russian schoolboy—especially due to linguistical difficulties. Old men in Georgian mountain villages usually have a very poor (if any) command of Russian. Finally, the story of the "Georgian patriarch" can have been artificially aged—such things happen in folklore. In short, nothing makes us prefer the information of Variant C to the internally consistent data of Variants A, B, and D.

Whatever the case, the event happened before the beginning of the 20th century. This certainly imposes essential restrictions on the type of aircraft that could then land in the south of the Russian Empire. First, airplanes had yet to be built. Gliders did fly, but only for very short distances, and their cockpits had room for only one pilot. Hence, the supposition, put forward in Ref. 6, that the legend describes the arrival of a glider that was brought to Northern Caucasia by air streams from India looks fantastic. The airship industry on the threshold of the 20th century was still in its infancy, and early airships' routes are well known: they never traversed the region under discussion.

Among terrestrial aircraft that were functional in those years only a free balloon could have a bearing on this incident. By the end of the 19th century ballooning became very popular, building such an aircraft was neither time-, nor labor-consuming, and a crew of three was not uncommon. However, the "balloon hypothesis" does not find any corroboration in the text of the legend. Eyewitnesses of a balloon landing would have been capable to make a recognizable description of such an apparatus, its shape and the materials of which it was made (a fabric envelope; a basket, woven of willow wands, and suspended below the balloon; ropes; etc.). Besides, the very word "balloon" (in Russian—*vozdushniy shar*) had became by then rather widespread. But we can know from the legend that the pilots arrived "not in a balloon", their machine "resembled a big arrowhead", having "many parts made of some metal". In contrast with the extremely scanty and indefinite characteristics of the aircraft, descriptions of the pilots do not differ essentially in the legend's variants. These were dark-skinned human-like beings having some difficulty breathing and being unable to communicate verbally with local people. They are persistently labeled as "persons"—*liudi* in Russian—even though being of unusual appearance.

It is not clear, to what extent we should trust the assertion of Variant B that "the men had no clothes" and "their bodies were covered with hair". This motif is not backed by Variant D which generally seems to give us the most plausible picture of the event. At the same time, it is hard to regard the motif of hairy (that is, animal-like) humanoids as a simple imaginative addition—since it contradicts the main characteristic of the visitors: they were "humans".

As evidenced by the foregoing account, there is good reason to rank this incident as a "ufological" one. First, we have here a story about an aircraft that not only escaped any identification by the eyewitnesses, but also remained unidentified after scientific analysis of all available data on it. Second, the plot of the legend does in fact coincide with the scheme of the events that are said to have taken place many years later in Roswell and some other places: there too, UFOs crashed and their pilots perished, their death being sometimes attributed to suffocation in the terrestrial atmosphere. Third, according to some present-day informants, hairy humanoids having no clothes occasionally appear from UFOs after their landings.

It must be emphasized that ufological folklore of this kind could not have influenced the people who reported the legend about the landing of the mysterious aircraft in the Stavropol region. Until relatively recent times, Russia was effectively isolated from the "outside world". The Soviet reader could not learn anything about Roswell-like stories before the book *Flying Saucers* by Donald Menzel was published in the USSR in 1962 [7, p. 172]. Meanwhile, all the main elements of the "Stavropol incident"—including the motif "they could not breathe with our air"—were recorded in written form as far back as 1957.

Any connection between the legend under consideration and the newspaper story about the Aurora, Texas, "UFO crash" that was supposed

to have happened on April 17, 1897 is also out of question. True, apart from the chronological proximity of these incidents, the latter story bears a resemblance to the Russian one at least in the following three essential motifs: a) it was an unknown aircraft that crashed; b) the dead pilot was buried in a local cemetery; c) fragments of the aircraft, made from a strange silvery metal, were gathered up by the local people as souvenirs. The newspaper report about the Aurora incident was subsequently exposed as a hoax. It had no effect at the time of its publication even in the United States; as for the Russian mass media, the earliest reference to this report may be traced down only to the late 1980's.

Everything seems to indicate that the Russian legend originated quite independently of its American counterparts of the 19th and 20th centuries, which certainly generates additional interest in its roots.

4. Hypothesis of a Balloon with a Parachute

The legend tells us that three men having no command of the local language traversed some "sky frontier"... Couldn't they be just foreign aeronauts? Let us consider a hypothesis proposed in this connection by Valeriy Kukushkin, a well-known Russian anomalist and folklore collector. In response to my paper [3], he sent me a manuscript of his work that was subsequently published in an abridged form (see Ref. 8). Below I will present the main ideas of Kukushkin's paper—referring, by his kind permission, to its original text.

Valeriy Kukushkin starts his analysis by examining the "space traveler version" of the incident. If the beings described in the legend had arrived from space, one could consider that their preparation for this visit was appallingly bad: they had neither space suits, nor even gas-masks. "Since the *stanitsa* residents,—goes on the author,—"quickly pulled apart" their landing module, it means that the latter had a very insignificant margin of safety—corresponding more to a lighter-than-air craft than to a descent space capsule that is designed to operate under great dynamic *g* loadings." Parts of this aircraft were easily adapted for using in peasant households; at the same time, no intricate parts of incomprehensible function were mentioned in the legend. Nothing strange ("miraculous") has been noted in the behavior of the visitors or in their equipment. Everything goes to indicate these were terrestrial people.

As for the vehicle, in which they arrived, V. A. Kukushkin comes up with an original idea: this was a parachute with a basket that had separated from a balloon. Such primitive parachutes were in use in aeronautics starting from the late 18th century. Having witnessed the forced landing of the aeronauts, the local people could compare with "a big arrowhead" either the parachute itself (if it had a hard cone-like frame), or the basket suspended from the parachute.

Especial attention is paid by the author of the hypothesis to the information that local people used some parts of the machine, made from a silvery metal, to manufacture kitchen utensils and *samovars*. "Kitchen utensils,—he reasons,—include cooking pots, frying pans, bowls—that is, cylinders of different heights with bottoms. *Samovars* are also long cylinders with bottoms. Blanks for these kitchen utensils must have been soft enough to saw or to cut. They must have been not too thick, as well as taking solder—otherwise soldering would have been impossible. The best possible blanks... might have been... medium-pressure oxygen cylinders." Such cylinders were in use in the late 19th century during high-altitude balloon flights. V. A. Kukushkin lists in his work several alloys known by that time that resembled silver and could be used to manufacture oxygen cylinders.

Where did the aeronauts come from? The only "sky frontier" that the Russian Empire had in the Stavropol region was the southern one. The dark skin of the visitors, noted by the local people, also suggests a southern origin. So, perhaps—Middle East? Or Africa?

Having analyzed the legend, V. A. Kukushkin concluded that the flight happened between 1830 and 1850. It was a significant period in the history of Egypt. Under the rule of Muhammad Ali Pasha this country achieved considerable successes in the economical, cultural, and military spheres. The Egyptian ruler tried to free his country from its subordination to the Ottoman Empire. This led to a number of armed clashes. In the battle of Nizip (summer of 1839) the Ottomans were defeated by the Egyptians. Kukushkin believes it quite probable that the Egyptian army had got balloons—since Muhammad Ali Pasha was drawing extensively on European specialists in his military forces, primarily French ones. Having made such an assumption, the author outlines the following hypothetical scenario:

In the summer of 1839 (or, most likely, somewhat later—in the fall or winter of that year) three Egyptians were making a reconnaissance flight in a balloon. A wind carried them off course to Turkish territory and then to the mountains (see the map in Fig. 2). In this region in fall and winter, the prevailing winds are from south-west to north-east, whereas in the northern part of the Caucasus the winds usually blow from the west to the east. Having climbed over the mountains, the aeronauts had to use oxygen cylinders for breathing, but the oxygen soon ran out. Breathing cold and rarefied air overstrained the aeronauts' lungs, their respiratory ducts becoming inflamed. Finally, the exhausted travellers

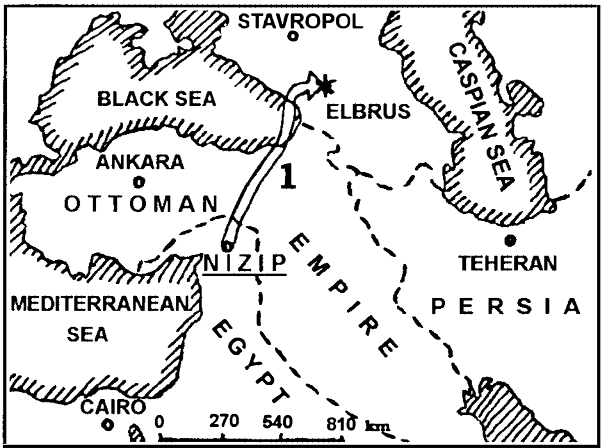


Fig. 2. Schematic map of the region of the incident. **1** — hypothetical path of the Egyptian balloon, according to V. A. Kukushkin

saw that the mountain ranges had been surmounted and they could descend. But the release valve had frozen onto the envelope (as has happened more than once in the history of ballooning), and the aeronauts decided to bale out with a parachute. Eyewitnesses on the ground, not noticing the balloon that swiftly disappeared in the sky, described only the landed vehicle—namely, the parachute and basket.

V. A. Kukushkin adds one more argument in favor of his hypothesis: "If it had been an attempt to achieve a record for range, altitude, or time of flight (and the more so, if it had been an air expedition), it would not have remained unnoticed by the press and historians. Organizers of such a flight would have made every effort to find the crew and the craft. But there was in fact no search. Therefore, its organizers had some grounds to conceal the flight. And a secret flight can have been made only with a military purpose."

The idea of V. A. Kukushkin's is not without appeal: the author's approach to the problem is highly rational, all the details have been thought out and are mutually consistent. Nevertheless, this scheme of the sequence of events is in fact unlikely. Oxygen cylinders were used in the 19th century only during high-altitude flights with scientific-research purposes, the first-ever known experiment of this kind being performed as late as 1875 (the flight of Tissandier, Sivel, and Croce-Spinelli, France). Parachute jumps from balloons were considered for the whole 19th century "only as a spectacular show" [9, p. 328]. In the light of all this, it seems doubtful that a balloon meant for air reconnaissance could have been equipped with oxygen cylinders and a bulky built-in parachute. Much less probable seems this idea when we consider the Egypt of the first half of the 19th century. There is no evidence at all for balloons being then in use in the country. Besides, even the author of this hypothesis admits that aeronautical history provides no example of a descent by a group of three aeronauts with one parachute.

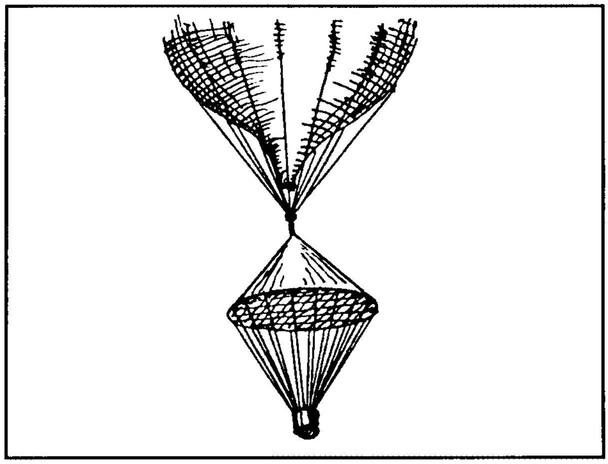


Fig. 3. A possible variant of the parachute's suspension from a balloon.

Just the same, the rational interpretation by V. A. Kukushkin of some "strange" motifs of the legend (the hard breathing of the pilots; parts of their aircraft made of a silvery metal) seems to outline an acceptable alternative to their "ufological" interpretation. In principle, the "balloon hypothesis" is reasonable and worthy of further elaboration.

5. Prospects of the Legend's Verification

More definite conclusions about the reality and nature of the event described in the legend can be drawn only on the basis of more reliable sources. As is evident from the foregoing, there is a good chance of discovering official documentary records, artifacts (parts of the aircraft), even, possibly, the grave of the pilots. But no practical searches in these directions have up to now been conducted.

This is hardly inexplicable, though. We know virtually nothing about the exact location of the scene of the event. Which archives should be searched for these data, also remains unclear. Information that a report about the incident was forwarded to the Academy of Sciences seems rather disputable. First, the Cossack *ataman* could hardly have been sure that the landing of an unknown aircraft with a crew speaking no Russian was of purely scientific interest. Second, he could not have sent his report to the capital of the state over the heads of his immediate superiors. Thus, the pertinent official documents may have been preserved both in regional archives of several provinces of Southern Russia and in archives of governmental ministries of defence and security—namely, the War Ministry (to which all Cossack regions were subordinated before 1917) and the Ministry for Internal Affairs. Taking into consideration the lack of a precise date for the incident, it becomes apparent that one cannot hope for immediate success in such an investi-

gation—even if some enthusiasts decide to start it.

The authors of the first paper on the "Russian Roswell"—Yuriy Biriukov and Valeriy Burdakov—failed to find any new information about this incident (see Ref. 10). In the early 1970's Alexander Kopeykin, a military pilot and a student of the UFO problem, questioned Kuban residents in this connection. The results were far from reassuring: "Local people have got no information on this case; the sole occurrence of a similar kind they can recall is the flight of a balloon with a Polish crew that, according to rumor, crashed in a fog in mountains at some time in the 1930's. It also appears that before 1917 the range of active exchange of information did not exceed 10 kilometers around settlements; that's why it is at present very difficult to obtain any useful information from old residents of the area. In fact, inhabitants of almost every settlement would need to be questioned on the matter." [11]

My article [3] was reprinted in the newspaper *Perekryostok Kentavra* (The Crossroads of the Centaur, 2000, No. 2) that is distributed mainly in the South Caucasus region. The article ends with an appeal to anyone who may have any additional information on the case to share it with the newspapers' readers. Unfortunately, up to this time no substantial responses have been obtained.

In the light of all the above-said, prospects of further work in this direction appear somewhat vague. Nevertheless, the story itself remains an intriguing and thought-provoking one. At least in these respects it seems to be worthy of its title—the Russian Roswell...

Acknowledgments

The author would like to thank Dr. Vladimir Rubtsov, Valeriy Kukushkin, and Mikhail Gershtein for valuable information and helpful comments.

References

1. Biriukov Y., Burdakov V., On the Track of a Legend.—*Yuniy Tekhnik*, Moscow, 1962, No. 4.
2. Anonymous. Visitors from Space?—*Molodoy Leninets*, Stavropol, 1965, August 29.
3. Morozov Y. "It was difficult for them to breathe with our air"—*Anomaliya*, St.-Petersburg, 1999, No. 20.
4. From the Editors.—*Ibid.*
5. Kirpichnikov A. Essays on Mythology of the 19th Century.—*Etnograficheskoye Obozreniye*, Moscow, 1894, No. 4.
6. Leshukonskiy A. A UFO Crash in the Stavropol Territory.—*NLO*, 2000, No. 25.
7. Menzel D. *O "Letayushchikh Tarelkakh"*. Moscow, 1962.
8. Kukushkin V. The Visitors Should Be Looked For In Egypt.—*Anomaliya*, St.-Petersburg, 2000, No. 15.
9. Wissmann G. *Geschichte der Luftfahrt von Ikarus bis zur Gegenwart.* 3. Aufl. Berlin, 1969.
10. Biriukov Y., Burdakov V., On the Track of a Legend.—*Yuniy Tekhnik*, Moscow, 1963, No. 7.
11. Kopeykin A. N. *Private Communication.* December 12, 1974.

PHYSIOLOGIC ABNORMALITIES IN ABDUCTEES: RESEARCH REPORT

Phillip S. Duke

Introduction

Persons allegedly abducted by ET aliens have been reported to chronically experience the vitamin A deficiency induced abnormality nyctalopia (night blindness) despite diets providing adequate vitamin A [1, p. 163]. This non-dietary vitamin A deficiency may be due to the mechanism of implant mediated vitamin A destruction. Vitamin A is involved in steroidogenesis (biosynthesis of steroid hormones by the adrenal cortex) and evidence is presented for steroid and sex hormonal deficiencies in abductees, presumably related to vitamin A deficiency or direct hormonal destruction.

Salt craving and anesthetic difficulties have also been previously reported among persons allegedly abducted by ET aliens [1]. Salt craving is logically due to excessive urinary salt loss, due to deficiency of the adrenal steroid mineralocorticoid hormone aldosterone, which functions primarily to reduce salt loss.

This Report briefly presents four abductee cases, one each in support of non-dietary nyctalopia, low aldosterone level, transient low adrenal glucocorticoid hormone level, and low estrogen level. The case of evident deficiency involving the female sex hormone estrogen is especially significant, as the estrogen deficiency signs and symptoms were eliminated by adding carrots and vitamin E to the diet.

Adding carrots and vitamin E (which being an antioxidant has a sparing action on vitamin A) to the daily diet will safely and markedly increase body vitamin A supply, and by doing so in theory might thereby work towards reestablishment of normal hormonal levels, by facilitating steroidogenesis, and/or competing with implant mediated hormonal destruction.

Signs and symptoms of estrogenic deficiency in a pre-menopausal abductee taking estradiol and vitamins without benefit, were promptly eliminated by adding carrots and vitamin E to

her diet. This non-toxic inexpensive dietary addition may be of benefit to other alleged abductees with physiologic abnormalities. Persons adding the carrot vitamin E (CE) regimen to their daily diets are requested to keep me informed.

Background

In Derrel Sims' study of 250 alleged abduction cases about 50% of the subjects suffer from night blindness (nyctalopia). About 90% of the female portion of the study suffer from nyctalopia. All subjects exhibited a compulsion to consume salty substances and applied large amounts of common table salt to meals. All subjects showed abnormal reactions to procaine (dental) local anesthetics, in that either the normal amount was not sufficient or there were frank outright allergic reactions to these compounds [1]. By my personal interviews with alleged abductees these reported results of Derrel Sims' studies have been confirmed. These phenomena are essentially as published on. It appears the physiologic phenomena are due to the presence of an implant, presumably of ET origin.

Visual Abnormalities. Nyctalopia (night blindness) is manifested by vision deficiency in dark adaptation. The person with night blindness typically cannot see adequately in dim light, where persons with normal vision can. Or when adaptation is still possible an abnormally long time is required. By making personal inquiries I have confirmed that females with a history of multiple abductions frequently cannot see to drive at night, crave salty foods, and may exhibit the described procaine anesthetic phenomena. One such alleged abductee informed me that night blindness was so common among her circle of alleged abductee friends it was assumed by them to be a female (sex linked genetic) trait. It is not. In theory genetically determined inability to employ vitamin A would be lethal. There are no genetic vitamin A deficiencies.

Nyctalopia is known to be due to a vitamin A deficiency. New vitamin A is constantly required (in small amounts) to produce the visual substance retinene as part of the normal visual cycle. Vitamin A is stored, primarily in the liver. Without adequate vitamin A intake the body stores eventually become depleted, and a deficiency occurs, resulting in nyctalopia [2, p. 145–146]. Vitamin A is specific for the cure and prevention of the vitamin A deficiency states nyctalopia (night) and hemeralopia (day) blindness, and the severe vitamin A deficiency disease xeropthalmia [2, p. 148]. Xeropthalmia refers to the more advanced clinical manifestations of severe Vitamin A deficiency which can lead to blindness, cell metaplasia (especially prominent in the lungs), and possibly even death.

Nyctalopia With Adequate Vitamin A Intake. All the alleged abductees interviewed had more than adequate intake of vitamin A and precursors. One person I call Jane who by my evaluation is an abductee with implant stated she takes a Vitamin A tablet (5000 Units) and cod liver oil (another good source) daily. She also likes to eat carrots, broccoli and other good sources of carotenes, which are normally converted to Vitamin A. Her fat and protein (mostly chicken) intake (necessary for Vitamin A absorption and use respectively) were normal. Her digestion is normal and she is relatively healthy, though with nyctalopia, salt craving, dental anesthetic problems, low resistance to infection, etc. There is no history of liver disease (carotene is converted to vitamin A in the liver). Therefore it is evident her nyctalopia, salt craving, and anesthetic problems are not due to inadequate intake of Vitamin A. It appears that despite more than adequate intake the vitamin A in her body is not adequate to allow normal night vision.

Possible Mechanism of Vitamin A Deficiency

It is reported that under black (long wavelength) ultraviolet (UV) light some implants fluoresced green [1, p. 123]. Vitamin A fluoresces a "characteristic green" [3, p. 1111]. Therefore a possible simple mechanism explaining both vitamin A deficiency and implant fluorescence would be implant adsorption of vitamin A presumably followed by inactivation of vitamin A.

According to this concept, the implant induces nyctalopia by inactivating vitamin A. Then despite apparently adequate intake, abductees with implants may have varying degrees of vitamin A deficiency caused by their implants.*

There are alleged abductees without nyctalopia, who can see to drive satisfactorily at night, but also report frequently experiencing abnormal sensitivity to sunlight. Seeing by sunlight irritates their eyes and produces pain and tearing. This transient sensitivity might conceivably be due to a transient corresponding vitamin A deficiency. In my opinion such extreme visual sensitivity to sunlight, which might conceivably result over time in hemeralopia (day blindness), is a more reliable indicator of possible abduction than is non-dietary nyctalopia. Of course both conditions may have medical causes other than abduction, such as inadequate vitamin A intake or absorption, which must be ruled out before taking them as possible indicators of abduction.

Hormones of the Adrenal Cortex. The possibility exists that alleged abductees' common complaints of fatigue, susceptibility to infection, autoimmune type disorders, allergic reactions etc. may be related to sub- clinical vitamin A deficiency, which in addition may possibly result in deficiencies of hormones of the adrenal cortex. According to the literature "Vitamin A is implicated in steroido-

* *Warning*—**excessive amounts of vitamin A are dangerous.** Its carotene precursor (such as from carrots) is believed safe to eat in quantity.

genesis (steroid production) in the adrenal glands" [6, p. 198]. Implants may conceivably destroy these hormones as well as vitamin A. Then vitamin A deficiency may conceivably manifest in a variety of clinical problems related to decreased levels of the adrenal hormones, which include the mineralocorticoid aldosterone (electrolyte regulation via sodium retention, sodium/potassium balance), and the glucocorticoids such as cortisol (metabolic, antistress and antiallergic affects, and others) [7].

Electrolyte Abnormalities. Salt craving is most commonly due to excessive loss of salt. Salt loss occurs in heavy sweating, due to elevated temperature, and in urinary excretion. The persons interviewed worked and lived in air conditioned spaces and were without fevers. Excessive salt loss into the urine is commonly associated with disease of the kidney or adrenal cortex. No history or evidence of kidney or adrenal cortex disease was presented. The adrenal cortex mineralocorticoid hormone aldosterone normally regulates body salt retention by stimulating sodium ion retention. In uncompensated clinical aldosterone deficiency the body suffers from markedly increased salt (sodium and chloride ion) loss into the urine, and there is also increased body potassium ion retention [2, p. 719]. This results in abnormally high potassium to sodium ratios in extracellular body fluids. This abnormal ratio condition has been found among abductees [4].

In a recent case reported to me by Dr. Roger Leir a male abductee's 24 hour urine showed an aldosterone level of 3.0 mcg/dL. The normal ranges are: normal sodium intake 100–200 mEq daily 6–25 mcg/dL, high sodium intake greater than 200 mEq daily 0–6 mcg/dL, low sodium intake less than 25 mEq daily 17–44 mcg/dL aldosterone. Sodium intake was normal, therefore the test result indicates low aldosterone concentration.

There is the case of a mutilated cow that despite being on normal supplement and in fall pasture, exhibited at autopsy an abnormally high extracellular potassium to sodium ratio, characteristic of abnormally low aldosterone production, and also a very low liver vitamin A level [5], so low that this animal very probably had nyctalopia. According to my hypothesis the missing left ear had been implanted some time previously [8, chapter 4]. Presumably the physiologic abnormalities were related to the implant.

Glucocorticoid Abnormalities. The concept that an implant may result in aldosterone deficiency suggests the possibility that other hormones of the adrenal cortex may also be deficient.

The most clinically important such hormones are the glucocorticoids, which have numerous functions. These include influences on protein, carbohydrate and lipid metabolism, resistance to stress and an antiallergenic action. The glucocorticoids prevent histamine release. They therefore relieve the symptoms of asthma and delayed hypersensitivity reactions such as hives and serum sickness (see Ref. 7, p. 284). They are also of symptomatic benefit in diseases in which allergic autoimmune reactions probably play a role [7, p. 263– 294].

Possible Adrenal Insufficiency After Abduction. An adult male I call Brad who by my evaluation is a multiple abductee with implant, volunteered the information that after what he now believes was an early abduction experience with possible implantation, his sense of smell and taste were markedly enhanced. This puzzled him and he asked if I knew anything about it. I did not. Later I found in the literature that this phenomenon of markedly increased sensitivity of smell and taste is stated to occur as a result of marked adrenal insufficiency, presumably related to markedly reduced glucocorticoids (see Ref. 7, p. 280, Abstracts of the 44th Meeting of the Endocrine Society). At this time his general health and sense of taste and smell are normal and he drives without difficulty at night. His transient sensory enhancement experience suggests that an early abduction was followed by a transient glucocorticoid deficiency.

Female Sex Hormone Deficiency. The sex hormones are produced in quantity by the gonads, and (in very small quantity) by the adrenal cortex. The possibility presents that an implant might produce sex hormone deficiency. A 57 year old (premenopausal) female I shall call Sue is by my evaluation a multiple abductee. She suffered for many months from severe night hot flashes and sweats, preventing sleep, and amenorrhea (no period) along with the usual alleged abductee problems of nyctalopia, salt craving and anesthetic difficulties. She was otherwise in generally good health, with a good diet supplemented by Centrum silver multivitamins/minerals once and St. John's wort 300 mg twice daily. Her gynecologist prescribed and she was taking Estrace (estradiol) female sex hormonal supplement 2 mg daily for several months, without benefit. Provera (medroxyprogesterone) 2.5 mg was prescribed daily later.

Deficiency Correction by Carotene and Vitamin E. I suggested an added daily regimen of carrots (to safely supply vitamin A) along with vitamin E which has a sparing affect on vitamin A, helping it work. My idea was that the vitamin A in quantity might compete with female sex hormones for space on the implant, thereby hopefully sparing and allowing the female sex hormones to work. Sue initiated an additional daily dietary addition of 3 medium sized raw carrots and 800 units vitamin E natural blend daily. Within a few days she reported the night hot flashes and sweats had stopped, allowing normal sleep, and normal menstrual bleeding began. Sue

reported that "the bleeding was proportional to the carrot intake." The bleeding became excessive and she discontinued the carrots and Vitamin E. Her gynecologist performed a D&C and a biopsy under anesthesia. There were no anesthetic difficulties despite a history of severe such problems. The bleeding was controlled and the night hot flashes and sweats returned, though to a lesser degree than before, despite continued use of the estradiol and Provera. The bleeding soon stopped and Sue returned to the full carrot regimen. The night hot flashes and sweats soon stopped and are now absent. Some cramping was present for a brief period. It is now also gone. The gynecological exam and biopsy results are normal. Sue is happy with the results of the carrot and vitamin E dietary addition and continues to employ it.

The foregoing cases suggest the possibility that adding carrots along with vitamin E to the daily diet, may be beneficial to abductees. Good sources of vitamin E include vegetable oils, nuts, and margarine. Exercise and smoking both deplete vitamins A and E.

Concerning the concept that abductees (with physiologic abnormalities) may possibly be benefited by markedly increased vitamin A intake, if a person wants to try this, the safe way is by markedly increasing dietary intake of carotene precursors of vitamin A. The body safely converts these into vitamin A. Good sources are carrots, squash, broccoli, and other yellow and green vegetables and fruits. A minimal amount of fat or oil and quality protein (American chicken is recommended due to its yellow fat carotene content) are required for vitamin A absorption and use. Vitamin E has a protective effect on vitamin A, and should be taken to help enhance vitamin A's effects. Taking excess vitamin A is dangerous. For this reason I do not repeat do not suggest that vitamin A be taken. Just eat several carrots daily. And take vitamin E daily. Carrots can be eaten raw or cooked. Cooked carrots are more digestible.

A Few Words in Conclusion

In terms of hard science the four reported cases are too few. But—it is the best I can do with what I have at present. The suggested dietary addition of carrots and vitamin E is safe and inexpensive. Let interested alleged abductees try it and then let us see what happens. Valuable data will be obtained, one way or the other, and people may be helped now.

The author is not licensed to practice medicine. If you desire medical assistance consult a physician without delay. I am not a physician. Should the reader have any questions, comments or related information, please contact me at <drpduke@juno.com>. My website: http://drpduke.com

Research Associates include Dr. Roger Leir, Mr. Harry Jordan, Mr. John Buder, Mr. Morgan Clements, and others.

References

1. Leir, Roger K. *The Alien and The Scalpel.* Granite Publishing, 1998.

2. Cantarow, A. and Schepartz, B. *Biochemistry.* Saunders, 1962.

3. *Merck Index*, Merck and Co., Inc., 8th Edition, 1968.

4. Leir, Roger K. *Private communication.*

5. Kelleher, Colm A., Onet, George E., and Davis, Eric W. *Investigation of the Unexplained Death of a Cow in N.E. Utah, October 16, 1998.* Final Report, National Institute for Discovery Sciences, Las Vegas, Nevada, June 1999.

6. Pfeiffer, Carl C. *Mental and Elementary Nutrients*. Keats Publishing Inc., 1975.

7. Ganong, W. F. *Review of Medical Physiology*, Lange Medical Publications, 1963.

8. Duke, Phillip S. *The AIDS-ET Connection.* Cosmos Press, 1999.

LETTERS TO THE EDITOR

A BIG STEP TO A RIGHT DIRECTION

Sir,

It was with much interest and pleasure that I read the paper "History of State-Directed UFO Research in the USSR" by Yuliy Platov and Boris Sokolov published in RB (1999, Vol. 5, No. 3-4) —the first comprehensive exposition of the results of prolonged and intensive scientific studies in this field that were carried out in the former Soviet Union. I must confess that in the 1970's I was rather puzzled by the censorial ban imposed on ufological publications in the Soviet press. There was an erroneous impression that this ban resulted from a sort of ideological pressure on the part of ruling Party organs. In fact, everything proved to be simpler, more comprehensible and much more rational: the "UFO ban" was due to the need to keep secret the information on rocket and aerospace tests in our country.

A second conclusion following from a thoughtful reading of the paper consists of the potential importance of keeping track of rocket launchings for gaining a deeper insight into physical processes in the upper atmosphere. Even though the data obtained in the course of this large-scale 13-year work will hardly lead to any major breakthrough in aerophysics (the atmosphere of the

Earth has been studied in sufficient detail), publication of these results would certainly be very desirable. Why not start also a special international program of surveillance of such launchings in the interests of geophysics and environmental studies?

Of course, the main aim of the *Setka AN* and *Setka MO* programs was somewhat different: the scientists tried to obtain an answer to the question about the nature and origin of the so-called "UFO phenomenon". It is particularly remarkable that the answer has been in fact obtained: the "UFO phenomenon" is primarily of psychosocial origin. Let me expand on this flat assertion. If at least 90 percent of UFO reports can be easily explained by trivial causes, and the nature of the "persisting" 10 (or even less) percent remains vague, it is quite obvious that so-called "true UFOs" (if any) can by no means lie at the heart of this "phenomenon". Furthermore, analyzing eyewitness testimonies, you can never learn anything meaningful about these "true UFOs"—their properties are closely hidden behind the "normal" phenomena mistaken by inexperienced witnesses for something anomalous.

Whether the "true UFOs" do exist, the paper's authors do not answer—which is, in my opinion, quite justifiable. Sorry, but scientists cannot chase these elusive "flying saucers" wherever they suddenly appear. If extraterrestrial space probes and starships do enter near space and terrestrial atmosphere, they must be detected by military radars and other surveillance systems, not by telescopes of astronomical observatories. Whether or not this happens in actuality, I am no judge (the more so that the lack of any detectable traces of ET craft in the atmosphere may always be explained away by UFO enthusiasts as an alien "super-stealth technology").

Anyway, the fact that during the 13 years of intensive studies no perceptible traces of alien machinery have been found is more than significant. Between the years 1947 and 2000 the yellow press in the USA, Russia, Britain, Ukraine, and many other countries has fed the reading public with such an amount of sensational stories about contacts with aliens, abductions, "hybrid babies", and "simple" UFO landings in almost every corner of our planet, that this absence of evidence is true evidence of absence, or rather a good proof of the psychosocial nature of the "UFO phenomenon". It is just a product of the "collective (sub?) consciousness" of modern society, a consequence of its inner need for something unusual and to a certain extent supernatural. In Soviet times UFO stories played the part of "mini-sensations" (since "true sensations" were, as a rule, lacking in Soviet mass media); at present they have also been *mini*mized—against the background of the boundless flood of journalistic rubbish constantly falling on the heads of meek readers.

Is the paper by Platov and Sokolov perfect? Probably not. As for me, for instance, it contains too few if any diagrams, tables, formulas, and figures—in particular, statistical ones: how many UFO reports were obtained by years and by months, which explanations have been found, which physical models of pseudoanomalous atmospheric phenomena have been proposed, how these models have been verified in subsequent cases, etc. But understandably enough, in full scope these materials could have been presented in a scientific monograph, not in a summary paper—and hopefully the authors will think about such a work.

As a whole, however, the paper by Yuliy Platov and Boris Sokolov is a real milestone in the investigations of the problem of anomalous atmospheric phenomena, and this assessment is no exaggeration at all. Its authors not only raise questions, but propose concrete, clear, substantiated answers to these questions. If one wishes to continue studies in this field, he certainly must take proper account of the wealth of experience of this really large-scale and truly scientific research program.

Alexey Koroliuk, Ph.D., Dnepropetrovsk, Ukraine

AN OPPORTUNITY THAT HAS NEVER MATERIALIZED

Sir,

The paper "History of State-Directed UFO Research in the USSR" by Yuliy Platov and Boris Sokolov, published simultaneously in *RIAP Bulletin*, 1999, Vol. 5, No. 3-4 and the *Herald of the Russian Academy of Sciences* (2000, Vol. 70, No. 6), deals with the history of the 13-year period of official attempts to look into the UFO phenomenon. I had occasion to participate in this research program as a representative of the Astronomical Council of the USSR Academy of Sciences that was charged with analyzing astronomical aspects of UFO reports. Here I would like to add a few words to the paper by Platov and Sokolov, in order to explain why the long-term investigations of the UFO problem on the territory of "The One-Sixth of Dry Land" [i.e. the USSR,—*Ed.*], under the flag of a Super Power, did not bring world science even an inch closer to its solution.

One cannot say that the large-scale UFO study program started in our country from nothing and for no earthly reason. In the atmosphere of the open hostility of Soviet authorities to all sorts of "deceptive sensations" penetrating the iron curtain from the West, there existed nonetheless in the USSR some groups of UFO enthusiasts sincerely trying to do what they could in the UFO field. However, the scientific community

treated the UFO phenomenon with more or less sincere disgust. I am quite sure that this attitude would have put an end by now to any attempts to study it, if there had not happened in September of 1977 a crucial coincidence: a UFO appeared over Petrozavodsk when a space rocket was launched from the nearby (some 300 km to the ENE) Plesetsk launching site. Since the times of these two events agreed to within a minute, there was an impression that the events were interconnected. The mechanism of this interconnection remained, however, vague. Besides, the question arose as to whether such anomalous phenomena could constitute a threat to space and military rocketry. These problems eventually gave rise to the *Setka AN* and *Galaktika* UFO study programs.

The present author participated in both of these programs on behalf of the Astronomical Council of the USSR Academy of Sciences (later on, it was incorporated as the Institute of Astronomy of the Russian Academy of Sciences), where I worked as a junior research fellow. It was partly due to the fact that all my colleagues were well informed about my hobby of many years: developing observational equipment for the instrumental detection of UFOs as physical objects.

Together with some friends of mine who worked at the Sternberg State Astronomical Institute (Y. K. Kolpakov, S. V. Mironov) and IZMIRAN (V. F. Savchenko), I became interested in the UFO problem as far back as 1970. Factual evidence we possessed was confined to letters of UFO witnesses gathered by another group of enthusiasts that was led by F. Y. Zigel in the archives of various journals and newspapers, as well as in those of Central TV. The witnesses described as (un)intelligibly as they could the strange phenomena they had encountered. These vague descriptions were sometimes accompanied by more or less primitive pictures. For us, men of observational science, it was fully obvious that subjective impressions of shocked eyewitnesses would never give to specialists any information that could be objectively analyzed. Explaining my position, I offered an analogy: even the most reliable testimonies of a million air passengers would not allow people having no knowledge of aviation to understand the principles of flight or to grasp aircraft design. That's why we set ourselves the task of creating a device that could record the most important (at least, at the initial stage of investigations) parameters of UFOs—namely, their dimensions, velocities, and distances to the objects at the moments of observation.

To emphasize the "principal" lack of any preferred hypothesis, we designated ourselves as the Group for Experimental Research on Aerial Phenomena—GERAPh.

Frankly speaking, to make head or tail of the existing body of dubious UFO reports written by inexperienced eyewitnesses is an absolutely unsolvable task. I am still surprised at the enthusiasm of Zigel, Azhazha, and their comrades-in-arms who stubbornly attacked the UFO problem from this direction, although as scientists they had to understand it was a dead end. The excitement, with which these "ufologists" classified UFOs and examined "UFO landing traces" made me and my colleagues hold ourselves aloof from them. Trying to develop a principally different approach to the UFO problem, we saw no need indeed to come into contacts with these collectors of folklore.

The famous Condon Report proved to be a great help to us in determining observational tasks. I am still preserving a microfilm of this fundamental work readily made at the time at the Lenin Library's Department of Microfilming. It is well known that the Condon Report was mercilessly criticized by proponents of "contacts of the 3rd kind" (that is, by believers in "space visitors"), since its authors had not found any traces of such contacts. But actually, the Condon Committee treated the UFO reports they possessed very objectively, admitting that some sightings could not be identified with any known phenomena—which made it possible to draw some valuable conclusions both concerning the most typical features of the UFO phenomenon and the probability of its observation at a given point.

Having studied almost 1000 pages of the Condon Report, we came to the following conclusions:

1. UFOs are seen in the day-time as dark formations against the back-cloth of the bright sky, and at night as bright luminous bodies against the back-cloth of the night darkness. Usually, their visible dimensions are less then or equal to the angular diameter of the moon. The reported levels of illuminance from these objects, as well as their contrast ratio, would make it possible to photograph them.

2. In most cases a UFO observation lasts several minutes, or sometimes (very rarely) several tens of minutes. One film cassette would suffice for shooting photos over a period of five to eight minutes; in the case of a longer duration observation, a spare cassette must be in stock, the camera being equipped for quick reloading.

3. Geographical and seasonal distributions of UFO sightings correspond sharply to the number of potential observers: such objects are more often seen in recreational zones, with their abundance of holiday- makers, in densely populated regions, and also in restricted areas, where the air traffic is routinely monitored. Therefore, UFO activity does not depend on the geographical coordinates of the place of observation. An optimistic estimate following from the Condon Report's data set suggests that a UFO sighting may occur at an arbitrary place once per 9 to 11 months.

Ten months of continuous observations are a long time indeed. Consequently, we had to create a device controlled by one operator only and not provoking excessive fatigue while waiting for a UFO to appear. We were ready to spend ten months of our vacations to have a chance of instrumentally recording a UFO. Such an observation would have been well worth thousands of eyewitness testimonies.

We planned to measure the following parameters of a UFO:

1) Its angular dimensions.

2) Distance to the object.

3) Surface brightness (at night), or albedo (in the day-time).

4) Angular coordinates of the UFO on the celestial sphere and their changes with time.

5) Spectrum and polarization of the radiation emitted by the object (at night).

All these tasks could be performed using a cine camera shooting the UFO through a binocular telescope and equipped with a spectroscope and a polariscope, as well as with a calibrated source of light (stabilized LED). The field of vision of our instrument had to be 1.5 angular degrees (three diameters of the full Moon), the range of measured distances—between 60 meters and 90 kilometers. Depending on the surface brightness of the UFO, determined by the operator through the equalization of brightnesses of the observed phenomenon and the standard light source, there had to be connected a wide-angle spectrograph and polarimeter. If the operator were able to hold the object in the cross-hairs, there would be switched on a narrow-angle spectrograph with higher resolving power. In the latter case it should be possible to determine on the UFO image those parts from which the spectrum is obtained.

Since there were at our disposal only some basic components (prisms, lenses, mirrors, cine film), plus rather primitive machine tools, we had to devise such an optomechanical design for our device that it could be manufactured in these conditions on our own. Having no sophisticated and therefore expensive equipment we worked out some original technical solutions to get around these obstacles.

We named our UFO detecting system as UDILO (from the Russian "Ustanovka Dlia Issledovaniya Letayushchikh Ob'ektov" = Device For Investigation of Flying Objects)*.

The UDILO project was being worked on, naturally enough, in the evening and at weekends, progressing not too rapidly, and some witty colleagues from the institute proposed to add to its title the word "modernized"**.

* At the same time, here is a pun: the Russian word *udilo* means "fishing rod",—*Ed.*

** MUDILO—again a pun, now somewhat indecent,—*Ed.*

However, the UDILO system has never been brought to completion. Soon there started the official UFO study program, with the participation of two dozen academical scientific research institutes, as well as the Army and Air Force, and we decided to stop our amateur activities. Instead, we took part in this official work.

At a first meeting of the working group on the *Setka* program, I proposed (quite officially, on behalf of the Astronomical Council of the USSR Academy of Sciences) to organize instrumental observations of UFOs with the help of UDILO-like equipment. The majority of the meeting participants were, however, not intending to begin any serious work on the subject not connected with their direct interests. Our idea seemed to them rather far- fetched. Since only the military had their own observation posts, nobody else could put it into practice. General N., having listened to all I had to say, asked me how soon some number of such devices might be produced and how much would they cost? I replied that such an apparatus could be made almost in no time on the basis of an artillery range finder and a 35 mm cine camera, its cost not exceeding 50 thousand roubles. (Even in 1977 this was not a very big sum.) The general remained silent and no further discussion followed. Probably, fifty thousand roubles were not worthy of serious consideration. If every device had cost, say, half a million roubles, this would have been another matter, corresponding to the general's level of competence.

I have given such a detailed account of GERAPh activities in order to emphasize one special feature of the *Setka* and *Galaktika* programs, tactfully avoided in the paper by Platov and Sokolov. The point is that the many-years-long official Soviet UFO study program followed the same traditional method of collecting reports from chance eyewitnesses and examining their contents as "unofficial" amateur "programs". As a result, neither a thorough analysis of reports about the Petrozavodsk phenomenon, gathered immediately after the event, nor collecting official documents and eyewitness testimonies throughout the vast territory of the whole Soviet Union, brought us any closer to the solution of the UFO enigma. And this sad conclusion is unfortunately lacking in the paper under consideration.

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